

In the claims:

80.(currently amended) A portable beverage preparation device comprising:

a portable drink container provided with a potable base liquid and at least one sealed compartment containing a beverage preparation kept isolated from said potable base liquid by a seal comprising at least two welded rings sufficiently spaced apart to prevent said potable base liquid from penetrating said sealed compartment; and

a heating/cooling unit controlled by a controller, said heating/cooling unit comprising:

a heating/cooling element ~~operable on the Peltier principle~~ for heating/cooling said potable base liquid, ~~and~~

wherein said potable base liquid is made to flow on the same surface of said heating/cooling element for either of heating and cooling when operating said heating/cooling element on the Peltier principle, and

at least one pump unit configured for drawing said potable base liquid from said portable drink container into said heating/cooling unit and returning said potable base liquid thereto after heating/cooling,

such that when said heating/cooling unit is removably attached to said portable drink container and operated, said potable base liquid is drawn into said heating/cooling unit by said at least one pump unit and heated/cooled to a predetermined temperature by said heating/cooling element and ~~is~~ returned under pressure back into said portable drink container through penetration of said seal, to mix with said beverage preparation within said sealed compartment, ~~breaking said seal thereby dispensing said mixed brew directly into said portable drink container~~ to provide a ready to drink brew ~~within said portable drink container.~~

81. (previously deleted)

82. (deleted)

83. (deleted)

84.(previously deleted)

85. (previously presented) The portable beverage preparation device of claim 80, wherein said drink container comprises a cup.

86. (previously presented) The portable beverage preparation device of claim 85, wherein said cup is provided with a sealed cover welded thereon by an attachment means forming a sealed cup unit containing said potable base liquid and said at least one sealed beverage preparation compartment needed to prepare a selected beverage drink.

87. (previously presented) The portable beverage preparation device of claim 86, wherein said sealed cover is configured with at least two utility openings covered with removable small covers comprising:

at least a first opening for extracting said beverage drink from said cup unit; and

at least a second opening for processing said beverage drink.

88. (previously presented) The portable beverage preparation device of claim 87, wherein said first opening provides for venting of said potable base liquid and for drinking therefrom.

89. (previously presented) The portable beverage preparation device of claim 87, wherein said removable small covers are applied to said utility openings to seal any waste materials inside said cup after use.

90. (previously presented) The portable beverage preparation device of claim 86, wherein said cup unit includes an inner cup nested in an outer cup, said inner cup spaced apart from said outer cup so as to define a chamber for holding liquid therebetween, and

wherein said outer cup is in communication with said chamber of said brewing element for receiving said potable base liquid that has passed therethrough.

91. (previously presented) The portable beverage preparation device of claim 86, wherein said cup unit is provided with a predetermined volume of said potable base liquid and includes an inner lid and an outer cover, wherein both said inner lid and said outer cover are removable for insertion of a user-selected beverage preparation element.

92. (previously presented) The portable beverage preparation device of claim 80, wherein said at least one beverage preparation element comprises at least one sealed compartment containing at least one beverage preparation selected from the group of edible materials including: coffee, tea, cocoa; dried fruits, dried vegetables; fruit juice, vegetable juice; milk and milk-substitute powders; syrups, sweeteners, flavorings; emulsions, solutions, extracts; dried herbs, medicines; liquid concentrates, liquid condensates, and any combination selected from said group of edible materials.

93. (previously presented) The portable beverage preparation device of claim 92, wherein said edible materials are in the form of dried, soluble edible substances.

94. (previously presented) The portable beverage preparation device of claim 92, wherein said at least one beverage preparation is dispersed in said potable base liquid by a dispenser means.

95. (previously presented) The portable beverage preparation device of claim 94, wherein said dispenser means comprises a hydraulic pump having a fixed arm and a moveable arm disposed within said drink container and said potable base liquid for effecting dispersion of said at least one beverage preparation confined within said at least one sealed compartment when pressure is applied by a user to the pressure point extremes of said fixed and moveable arms.

96. (previously presented) The portable beverage preparation device of claim 94, wherein said dispenser means comprises water pressure.

97. (previously presented) A portable beverage preparation device comprising:

- a drink container comprising:

- a sealed cover attached thereto configured with at least two utility openings fitted with removable covers;

- a predetermined volume of potable base liquid;

- at least one sealed compartment provided with at least one bore for confining a beverage preparation,

- wherein said potable base liquid and said at least one sealed compartment are in close proximity within said drink container and covered by said sealed cover;

- a heating/cooling unit for heating/cooling said potable base liquid, said heating/cooling unit including a heating/cooling element;

- at least one pump unit for pumping and circulating said potable base liquid; and

- a controller and a power source for controlling and activating said at least one pump unit,

- wherein said heating/cooling unit, said at least one pump unit, and said controller are disposed in a portable housing comprising a heating/cooling chamber, and

wherein when said at least one pump unit is connected to a power source and operated, said potable base liquid is circulated so as to be heated/cooled by said heating/cooling unit and mixed with said beverage preparation to provide a heated/cooled beverage in said drink container.

98. (currently amended) The portable beverage preparation device of claim 97 further comprising:

a portable heating device configured to be attached to said drink container ~~containing a potable base liquid~~ for providing heating of a beverage drink on demand.

99. (previously presented) The portable beverage preparation device of claim 98, wherein said portable heating device comprises a heating element, including heating coils, configured for direct insertion into said potable base liquid.

100. (previously presented) The portable beverage preparation device of claim 98, wherein said portable heating device comprises a solid-state heat pump that utilizes the Peltier effect for either of heating and cooling said beverage drink.

101. (previously presented) The portable beverage preparation device of claim 98, wherein said heating device further includes:

a holding chamber for accommodating at least a portion of said potable base liquid;

at least one heat-activated valve for controlling the flow of said potable base liquid through said heating element;

a heater rod extending into said holding chamber; and

a tube in communication with said holding chamber and said beverage preparation element,

wherein said heater element, when fitted within said holding chamber and activated, operates said heater rod to heat said at

least a portion of said potable base liquid to at least boiling within said holding chamber, and

wherein said holding chamber retains said potable base liquid by activation of said at least one heat-activated valve to produce pressure in said holding chamber for pushing said heated potable base liquid through said tube.

102.(previously presented) The portable beverage preparation device of claim 101, wherein said heat-activated valve includes a bimetal strip.

103-105.(previously deleted)

106.(currently amended) A portable beverage preparation system comprising:

a cup unit including an inner cup formed integrally with an outer cup, said inner cup spaced apart from said outer cup so as to define a chamber for holding a potable base liquid therebetween;

a heating/cooling unit ~~for heating said potable base liquid~~  
comprising:

a heating/cooling element for heating/cooling said  
potable base liquid; and

a brewing element configured with at least one pocket for  
holding at least one beverage preparation for fitting on said inner  
cup, for the passage of said potable base liquid therethrough, and  
including an outlet proximate to the periphery of said outer cup,

~~wherein said brewing element is configured with at least one~~  
~~pocket for holding at least one beverage preparation and configured~~  
~~for the passage of said potable base liquid therethrough, and~~  
~~including an outlet proximate to the periphery of said outer cup.~~  
and

at least one pump unit configured for drawing said potable  
base liquid from said portable drink container into said

heating/cooling unit and returning said potable base liquid thereto after heating/cooling,

wherein said potable base liquid is made to flow on the same surface of said heating/cooling element for either of heating and cooling when operating said heating/cooling element on the Peltier principle,

such that when said heating/cooling unit is removably attached to said portable drink container and operated, said potable base liquid is drawn into said heating/cooling unit by said at least one pump unit and heated/cooled to a predetermined temperature by said heating/cooling element and returned under pressure back into said portable drink container, mixed with said beverage preparation, and dispensed within said cup unit to provide a ready to drink brew.

107.(previously presented) The beverage preparation system of claim 106, wherein said outer cup is provided with external isolation ribs for dissipating heat when said outer cup is filled with a hot liquid.

108.(previously deleted)

109.(previously presented) The beverage preparation system of claim 106, wherein said at least one beverage preparation is espresso.

110.(previously deleted)

111. (previously presented) The beverage preparation system of claim 106, wherein said brewing element is provided with a centrally disposed bore oriented axially within said brewing element.

112. (previously presented) The beverage preparation system of claim 106, wherein said brewing element is provided with a bore

axially offset with respect to the central axis of said brewing element.

113. (previously presented) The beverage preparation system of claim 106, wherein said brewing element further comprises at least two concentric rings, for storage of at least two types of beverage preparations.

114. (previously presented) The beverage preparation system of claim 106, wherein said brewing element has a spiral configuration, said liquid entering said spiral at an inner edge thereof and exiting at an outer edge thereof, said outer edge communicating with said second cup.

115. (previously presented) The beverage preparation system of claim 114, wherein said spiral configuration has at least two beverage preparation areas arranged sequentially in the spiral,

such that said potable base liquid enters said spiral at said inner edge and passes through said first beverage preparation area and continues to pass through said spiral through a second beverage preparation area and exits through said outer edge communicating with said second cup.

116. (previously deleted)

117. (currently amended) The portable beverage preparation system of claim 106, wherein said heating/cooling unit further comprises:

a holding chamber for accommodating at least a portion of said potable base liquid;

at least one heat-activated valve for sealing said holding chamber to confine said portion in said holding chamber;

a heater rod extending into said holding chamber; and

a tube in communication with said holding chamber and said beverage preparation,



wherein said heating/cooling unit, when activated, operates said heater rod to heat said at least a portion of said potable liquid to at least boiling temperature within said holding chamber, such that said holding chamber retains said potable base liquid by activation of said at least one heat-activated valve to produce pressure in said holding chamber for pushing said heated potable base liquid through said tube and into said beverage preparation.

118-122.(previously deleted)

123.(previously presented) The beverage preparation system of claim 117, wherein said at least one heat-activated valve includes a vent for providing venting from said holding chamber.

124.(currently as amended) A method for preparing a beverage drink comprising:

providing a portable drink container with a potable base liquid and at least one sealed compartment containing a beverage preparation kept isolated from said potable base liquid by a seal comprising at least two welded rings sufficiently spaced apart to prevent said potable base liquid from penetrating said sealed compartment;

drawing said potable base liquid from said portable drink container into said heating/cooling unit and returning said potable base liquid thereto after heating/cooling said potable base liquid;

and

flushing said at least one beverage preparation from said at least one sealed compartment into said potable base liquid by one of pressure action and sprinkler means,

thereby penetrating said seal, to mix said beverage preparation with said potable base liquid.

125. (previously presented) The method of claim 124 wherein said potable base liquid is treated water.

126. (currently amended) A method for preparing a brewed beverage drink comprising:

a) providing a portable drink container with a potable base liquid;

b) providing a brewing element, including at least one sealed compartment containing a beverage preparation kept isolated from said potable base liquid by a seal comprising at least two welded rings sufficiently spaced apart to prevent said potable base liquid from penetrating said sealed compartment;

c) drawing said potable base liquid from said portable drink container and continuously heating predetermined quantities of said potable base liquid to a predetermined temperature, and returning said potable base liquid thereto; and

d) pressurizing said heated liquid to force it into and out of said beverage preparation confined within said at least one sealed compartment,

thereby penetrating said seal, to mix said beverage preparation with said potable base liquid.

127. (previously presented) The method of claim 126, additionally comprising:

e) repeating steps *b*, *c*, and *d*.